



## CAT® BREAKER-BASED CLOSED / DELAYED TRANSITION AUTOMATIC TRANSFER SWITCH

Cat® transfer switches are designed for a variety of standby power applications. They provide flexibility, reliability and value in a compact package. The closed transition breaker-based Automatic Transfer Switch (ATS) is designed to protect critical loads against loss of power. The Cat Closed Transition Breaker Based ATS also permit periodic testing of the emergency source without interrupting power to the loads and are available from 200 to 5,000 amperes.

### FEATURES

- ATC-800 microprocessor-based controller
- True RMS three phase voltage sensing on Source 1, Source 2 and Load
- Frequency sensing on Normal and Source 2
- Source paralleling duration is limited to 100 msec or less
- Full 30 cycle short time withstand capability
- Multiple field programmable time delays
- Switch position indication
- Source availability indication
- Source 1 and 2 auxiliary contacts
- Programmable plant exerciser
- System test pushbutton
- Load shed from emergency
- Mimic diagram
- Safe manual operation under full load with permanently affixed operating handle

## OPTIONS

- Suitable for service entrance
- Integral overcurrent protection
- 2- or 4-position test switch
- Multi meter options available
- Delayed Transition
- Selectable Automatic or Non-Automatic operation
- Space heaters
- Load sequencing contacts
- Surge suppression
- Remote communications
- Molded Case or Drawout Switches
- Field selectable, multi ratio, control voltage transformer 50/60 Hz

## OPTIONAL DELAYED TRANSITION INCLUDES:

- Time Delay Neutral
- In-Phase Transition
- Pre-Transfer Signal with 1 N.O. and 1 N.C. contacts

## RATINGS

- Fixed Mount 200-3200A 2, 3, or 4 Pole
- Drawout 200-5000A 2-, 3-, 4-pole
- 120 – 600 Vac 50/60 Hz
- 100,000 amps withstand/closing/ interrupting at 480 Vac
- 100% rated
- Short Time Withstand – 85,000 for 30 cycles
- UL 1008 listed
- CSA C22.2 No. 178 certified
- IBC 2006 and CBC 2007

## CONTROLS AND WIRING

All control relays and industrial-grade relays are totally encapsulated to minimize exposure to dust and dirt. Lugs are 90°C rated and all control wire is #16 AWG, type XLPE with a 125°C temperature rating.

## ENCLOSURE

Durable powder-coated steel NEMA 1 or 3R. The enclosures are Seismic Zone 4 Qualified (BOCA, CBC, IBC, UBC). The hinges have removable hinge pins to facilitate door removal for easy wall mounting or service and are supplied with pad-lockable latches.



## TESTING STANDARDS

UL 991 UL standards for safety tests for safety-related controls employing solid-state devices	IEC 1000-5 Surge withstand tests
UL 1008 Dielectric test (endurance, withstand, etc.)	NEMA® ICS 109.21 Impulse withstand test
IEEE® 472 (ANSI C37.90A) Ringing wave immunity/voltage surge test	CSA® conformance C22.2 No. 178-1978 (reaffirmed 1992)
EN55022 (CISPR11): Conducted and radiated emissions	UL 869A Reference Std for Service Equipment
EN61000-4-2 Class B Level 4 ESD immunity test	UL 50/508 Enclosures
EN61000-4-3 (ENV50140) radiated RF, electromagnetic field immunity test	NEMA ICS 1 General standards for industrial control system
EN61000-4-4 Electrical fast transient/burst immunity test	NEMA ICS 2 Standards for industrial control devices, controllers, and assemblies
EN61000-4-5 IEEE C62.41: Surge immunity test	NEMA ICS 6 Enclosures for industrial controls and systems
EN61000-4-6 (ENV50141) Conducted immunity test	NEMA ICS 10-1993 AC automatic transfer switches
EN61000-4-11 Voltage dips and interruption immunity	ANSI C33.76 Enclosures
FCC Part 15 Conducted/radiated emissions (Class A)	NEC® 517, 700, 701, and 702 National Electrical Code
CISPR 11 Conducted/radiated emissions (Class A)	NFPA® 70 National Fire Protection Agency
IEC 1000-2 Electrostatic discharge test	NFPA 99 Health care facilities
IEC 1000-3 Radiated susceptibility tests	NFPA 101 Life safety code
IEC 1000-4 Fast transient tests	NFPA 110 Emergency and standby power systems
	EGSA 100S Standard for transfer switches
	CSA C22.2 No. 178-1978 Canadian Standards Association

# AUTOMATIC TRANSFER SWITCH



## FIXED MOUNT BREAKER-BASED TRANSFER SWITCH 200–5000A DIMENSIONS\*

Ampere Rating	Number of Poles	Enclosure			Standard Terminals			Shipping Weight Lbs. (kg)
		Height	Width	Depth	Load Side, Normal, and Standby Source	Neutral Connection		
<b>NEMA 1 Enclosed Fixed Mount Transfer Switch</b>								
200-2000@ 480V	2	90 (2286)	32 (711)	48 (1219)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1050 (477)	
	3	90 (2286)	32 (711)	48 (1219)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1050 (477)	
	4	90 (2286)	32 (711)	48 (1219)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1250 (568)	
200-2000@ 600V	2	90 (2286)	32 (711)	48 (1219)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1050 (477)	
	3	90 (2286)	32 (711)	48 (1219)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1050 (477)	
	4	90 (2286)	32 (711)	48 (1219)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1250 (568)	
2500-3200@480V	2	90 (2286)	44 (1118)	48 (1219)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	1900 (863)	
	3	90 (2286)	44 (1118)	48 (1219)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	1900 (863)	
	4	90 (2286)	44 (1118)	48 (1219)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	2000 (910)	
2500-3200@600V	2	90 (2286)	44 (1118)	48 (1219)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	1900 (863)	
	3	90 (2286)	44 (1118)	48 (1219)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	1900 (863)	
	4	90 (2286)	44 (1118)	48 (1219)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	2000 (910)	
4000-5000	2							
	3				Consult Factory			
	4							
<b>NEMA 3R Enclosed Fixed Mount Transfer Switch</b>								
200-2000@ 480V	2	90 (2286)	32 (711)	63 (1600)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1600 (727)	
	3	90 (2286)	32 (711)	63 (1600)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1600 (727)	
	4	90 (2286)	32 (711)	63 (1600)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1800 (818)	
200-2000@ 600V	2	90 (2286)	32 (711)	63 (1600)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1600 (727)	
	3	90 (2286)	32 (711)	63 (1600)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1600 (727)	
	4	90 (2286)	32 (711)	63 (1600)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1800 (818)	
2500-3200@480V	2	90 (2286)	44 (1118)	63 (1600)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	2400 (1091)	
	3	90 (2286)	44 (1118)	63 (1600)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	2400 (1091)	
	4	90 (2286)	44 (1118)	63 (1600)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	2500 (1136)	
2500-3200@600V	2	90 (2286)	44 (1118)	63 (1600)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	2400 (1091)	
	3	90 (2286)	44 (1118)	63 (1600)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	2400 (1091)	
	4	90 (2286)	44 (1118)	63 (1600)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	2500 (1136)	
4000-5000	2							
	3				Consult Factory			
	4							

Dimensions in Inches (mm) & Approximate Shipping lbs (kg)

# AUTOMATIC TRANSFER SWITCH



## DRAWOUT BREAKER-BASED TRANSFER SWITCH 200–5000A

Ampere Rating	Number of Poles	Enclosure			Standard Terminals		
		Height	Width	Depth	Load Side, Normal and Standby Source	Neutral Connection	Shipping Weight Lbs. (kg)
<b>NEMA 1 Enclosed Drawout Transfer Switch</b>							
200-2000@ 480V	2	90 (2286)	32 (813)	60 (1524)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1600 (727)
	3	90 (2286)	32 (813)	60 (1524)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1600 (727)
	4	90 (2286)	32 (813)	60 (1524)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1900 (864)
200-2000@ 600V	2	90 (2286)	32 (813)	60 (1524)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1600 (727)
	3	90 (2286)	32 (813)	60 (1524)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1600 (727)
	4	90 (2286)	32 (813)	60 (1524)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	1900 (864)
2500-3200@480V	2	90 (2286)	44 (1118)	60 (1524)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	2500 (1136)
	3	90 (2286)	44 (1118)	60 (1524)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	2500 (1136)
	4	90 (2286)	44 (1118)	60 (1524)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	2800 (1273)
2500-3200@600V	2	90 (2286)	44 (1118)	60 (1524)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	2500 (1136)
	3	90 (2286)	44 (1118)	60 (1524)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	2500 (1136)
	4	90 (2286)	44 (1118)	60 (1524)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	2800 (1273)
4000-5000	2						
	3				Consult Factory		
	4						
<b>NEMA 3R Enclosed Drawout Transfer Switch</b>							
200-2000@ 480V	2	90 (2286)	32 (813)	75 (1905)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	2100 (955)
	3	90 (2286)	32 (813)	75 (1905)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	2100 (955)
	4	90 (2286)	32 (813)	75 (1905)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	2400 (1009)
200-2000@ 600V	2	90 (2286)	32 (813)	75 (1905)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	2100 (955)
	3	90 (2286)	32 (813)	75 (1905)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	2100 (955)
	4	90 (2286)	32 (813)	75 (1905)	(6) 3/0 - 750 kcmil Bottom Entry	(24) 4/0 - 500	2400 (1009)
2500-3200@480V	2	90 (2286)	44 (1118)	75 (1905)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	3000 (1364)
	3	90 (2286)	44 (1118)	75 (1905)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	3000 (1364)
	4	90 (2286)	44 (1118)	75 (1905)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	3300 (1500)
2500-3200@600V	2	90 (2286)	44 (1118)	75 (1905)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	3000 (1364)
	3	90 (2286)	44 (1118)	75 (1905)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	3000 (1364)
	4	90 (2286)	44 (1118)	75 (1905)	(9) 3/0 - 750 kcmil Bottom Entry	(36) 4/0 - 500	3300 (1500)
4000-5000	2						
	3				Consult Factory		
	4						

Dimensions in Inches (mm) & Approximate Shipping lbs (kg)

## UL 1008 WITHSTAND AND CLOSE-ON RATINGS (kA)

Rating When Used with:

Ampere Rating	Upstream Circuit	Upstream Breaker
	Breaker 3-Cycle 600 V (kA)	with Short Time Response 30-Cycle 600 V (kA)
800	100	85
1000	100	85
1200	100	85
1600	100	85
2000	100	85
2500	100	85
3200	100	85
4000	100	85
5000	100	85

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